



Wildwood MP 10.14 Bridge Scour Project

Wetland and Stream Delineation Report

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Executive Summary

The Lewis County Department of Public Works (County) is proposing to install scour countermeasures at the Wildwood Road Mile Post (MP) 10.14 Bridge spanning the South Fork Chehalis River (Lewis County Bridge No. 03) in unincorporated Lewis County. The 124-foot three span bridge was originally constructed in 1955 and is currently classified as scour critical.

The County requested Otak, Inc. (Otak) to identify, characterize, and delineate wetlands and stream boundaries and assess wildlife habitat at the Wildwood Road and South Fork Chehalis River crossing as part of the County's repair of Lewis County Bridge No. 03. This Wetland and Stream Delineation Report was completed for the project by reviewing background information, delineating wetland and stream boundaries in the field, classifying wetlands and stream habitats and assessing their functions, and determining buffer widths per the Lewis County Code (LCC) Chapter 17.38 (Critical Areas) and Shoreline Master Program at LCC 17.25. Critical areas covered in this report include wetlands, streams, and fish and wildlife habitat conservation areas (FWHCAs).

Otak biologists conducted field investigations on December 3, 2024. The study area for this report included areas along both sides of Wildwood Road and South Fork Chehalis River, upstream and downstream of Bridge No. 03. Areas immediately beyond the study area were also visually assessed to identify any wetlands and streams with buffers that could extend into the study area.

Utilizing techniques and methods published in the *1987 US Army Corps of Engineers (USACE) Wetlands Delineation Manual* (USACE 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region* (Version 2.0) (USACE 2010), no wetlands were observed in the project study area or in the adjacent areas.

One stream (South Fork Chehalis River) was identified in the study area. The South Fork Chehalis River is a Type S (Shoreline of the State) stream with an assigned buffer of 0 feet per the Lewis County Shoreline Master Program (Table 4-1, Section 4.04.02).

The project is located within the 100-year floodplain of the South Fork Chehalis River. The project area is within the Rural Conservancy Shoreline Environment Designation per the Lewis County Shoreline Master Program.

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Section 1. Introduction

Lewis County (County) requested Otak, Inc. (Otak) to identify, characterize, and delineate wetlands and streams and assess wildlife habitat for the County's repair of Lewis County Bridge No. 03. This Wetland and Stream Delineation Report was completed along the road right-of-way, South Fork Chehalis River, and potential access and staging areas by reviewing background information, delineating wetland and stream boundaries in the field, classifying wetlands and stream habitats and assessing their functions, and determining buffer widths per the Lewis County Code (LCC) Chapter 17.38 (Critical Areas) (Lewis County 2025a) and the Lewis County Shoreline Management program (LCC 17.25)(Lewis County 2021). This Wetland and Stream Delineation Report has been prepared in accordance with county, state, and federal standards to document baseline conditions regarding frequently flooded areas, wetlands, streams, and fish and wildlife habitat conservation areas (FWHCAs).

1.1. Project Location and Landscape Setting

The proposed project is located on Wildwood Road at the crossing of the South Fork Chehalis River in unincorporated Lewis County, Washington (Appendix B: Figure 1—Vicinity Map). It is located in Section 24, Township 12 North, Range 4 West, in Water Resource Inventory Area (WRIA) 23 – Upper Chehalis. The project area generally includes areas along Wildwood Road within 100 feet of the South Fork Chehalis River bridge. Land abutting the project area includes agricultural and undeveloped areas. The South Fork Chehalis River flows through the project area from southwest to northeast passing under Wildwood Road at mile post (MP) 10.14. The project area is within the 100-year floodplain of the South Fork Chehalis River.

1.2. Project Description

The County is proposing to install scour countermeasures at Lewis County Bridge No. 03 in unincorporated Lewis County. The 124-foot three span bridge was originally constructed in 1955 and is currently classified as scour critical. The project intends to complete necessary repairs to the bridge in order to maintain vehicular access and protect public safety along Wildwood Road.

Section 2. Methods

This chapter summarizes the methods used in accordance with local, state, and federal guidance in delineating wetland and stream boundaries in Washington State. While no wetlands were present, the study area was evaluated for the presence of wetlands using the methodology outlined in this section. See Table A-1 in Appendix A for further details regarding the methods used to produce this report.

2.1. Review of Available Published Information

Available published information was reviewed prior to the field investigation to identify any previously documented wetlands, streams, or other pertinent site characteristics (e.g., vegetation community patterns, topography, soils, or water courses) that would indicate the presence of wetlands, streams and other critical areas within the project site. These maps are typically used as guidance, and do not supersede conditions in the field. As part of this effort Otak biologists reviewed the following sources:

- Soil survey from the United States Natural Resources Conservation Service (NRCS) (NRCS 2025a);
- National Wetlands Inventory (NWI) map (USFWS 2025a);
- United States Geological Survey (USGS) topographic maps (USGS 2025)
- Washington Department of Natural Resources (WDNR) Forest Practices Application Mapping Tool (WDNR 2025);
- Lewis County GIS Web Map (Lewis County 2025b);
- Washington Department of Fish and Wildlife (WDFW) Priority Habitat and Species (PHS) maps (WDFW 2025a);
- Statewide Washington Integrated Fish Distribution Map (SWIFD) (WDFW 2025b);
- U.S. Fish & Wildlife Service (USFWS) Information for Planning and Consultation Tool (IPaC) (USFWS 2025b).

Appendix B contains figures associated with the background review, including: 2024 aerial photography of the study area (Figure 2) (Maxar 2024), USGS Topographic map (Figure 3), NWI map (Figure 4), NRCS Soils map (Figure 5), Lewis County Critical Areas Inventory (Figure 6), and Lewis County Shoreline Environment Designations (Figure 7).

Soil units mapped within the study area include three soil series: Chehalis silty clay, Melbourne loam, and Newberg fine sandy loam (Table 2-1)(Figure 5). Major soil components of the map unit soil series are classified non-hydric. Minor components of the soil series are classified as hydric.

Table 2-1 – NRCS Soil Units Mapped in Study Area.

Mapped Soil Unit	Slope %	Drainage Class	Landform	Parent Material	Hydric?
Chehalis silty clay	0-3	Well drained	Flood Plains & Terraces	Alluvium	No (10% hydric minor components)
Melbourne loam	0-8	Well drained	Terraces	Residuum from siltstone	No (5% hydric minor components)
Newberg fine sandy loam	0-3	Well drained	Terraces & Flood Plains	-	No (15% hydric minor components)

The NWI map identifies the South Fork Chehalis River corridor as a permanently flooded, unconsolidated bottom, upper perennial riverine (R3UBH) habitat. Additionally, a persistent, seasonally flooded, palustrine emergent freshwater wetland (PEM1C) is mapped northeast of the study area.

The WDNR Forest Practices Application Mapping Tool maps the South Fork Chehalis River as a Type S (Shoreline of the State) waterbody. A wetland is mapped by Lewis County offsite and northeast of the study area. Species identified by the WDFW PHS mapper include occurrence and migration of rainbow trout and winter steelhead trout (*Oncorhynchus mykiss*), occurrence and breeding of fall and spring Chinook salmon (*Oncorhynchus tshawytscha*), occurrence and migration of resident coastal cutthroat (*Oncorhynchus clarki*), and occurrence and migration of coho salmon (*Oncorhynchus kisutch*) in the South Fork Chehalis River. The WDFW PHS mapper also identified regular concentrations (winter range) of the Willapa Herd of Roosevelt elk (*Cervus elaphus roosevelti*) in the general vicinity.

Regarding species listed under the Endangered Species Act (ESA), the USFWS IPaC tool maps the potential presence of marbled murrelet (*Brachyramphus marmoratus*), yellow-billed cuckoo (*Coccyzus americanus*), bull trout (*Salvelinus confluentus*), monarch butterfly (*Danaus plexippus*), Suckley's cuckoo bumble bee (*Bombus suckleyi*) and Kincaid's lupine (*Lupinus sulphureus ssp. kincaidii*). However, suitable habitats for these ESA-listed species do not occur in the study area, and no designated critical habitats for ESA-listed species are mapped at this location.

2.2. Precipitation Data and Analysis

2.2.1. Evaluation of Growing Season

Wetland hydrologic conditions are considered present if soils are inundated or saturated to the surface continuously for at least 5 percent of the growing season in most years (50 percent probability of recurrence) (USACE 1987). The technical standard for disturbed or problematic sites requires 14 or more consecutive days of flooding or ponding, or a water table 12 inches or less below the soil surface, during the growing season, at a minimum frequency of 5 years in 10 (USACE 2010).

The beginning and ending dates of the growing season can be defined based on two indicators of biological activity that are readily observable in the field: (1) above ground growth and development of vascular plants, and (2) soil temperature. However, due to seasonal fluctuations from year to year the growing season dates may also be approximated by the number of frost-free days, defined as the time from the last date in spring when the ambient air temperature drops to 28°F, to the first date in fall when it drops to 28°F, over a 30-year period (USACE 2010).

Due to insufficient data, the beginning and ending dates for the growing season for the project site were not estimated from long-term weather records (1994-2023) at the Mayfield Power Plant Climate Station as the median dates (70 percent probability) for the first and last 28°F days. The estimated dates corresponding with the growing season are based on historical climate data and information obtained from the nearest climate station with sufficient data. The nearest climate station with complete historical monthly precipitation data for the 30-year period prior to the site visit is the Centralia Climate Station (NRCS 2025b). Based on long-term weather records at this station, the average start and end dates for the growing season for the area are March 23 and November 15, respectively, for a total growing season of 237 days (NRCS 2025b). As such, continuing wetland hydrologic conditions must be present for at least 12 consecutive days during the growing season for this site.

2.2.2. Precipitation Data during Field Investigation

The field survey for the project was conducted on December 3, 2024. The area received 3.51 inches of precipitation in the two-week period (November 18 – December 2) prior to the field survey as measured at

the Mayfield Power Plant Climate Station (NRCS 2025c). The Mayfield Power Plant Climate Station was used to evaluate recent precipitation during the field visit because the Centralia Climate Station did not have recent data available. Precipitation amounts for the three months preceding the field survey were normal in September 2024, above normal in October 2024, and normal in November 2024 (Table 2-2) as measured at the Mayfield Power Plant Climate Station.

Table 2-2—Summary of Precipitation Data from September 1 to November 30, 2024

Category	September 2024	October 2024	November 2024
Recorded Precipitation (inches)	1.40	5.38	7.57
Precipitation Average	1.63	4.01	6.59
30-70% Normal Range (inches) from 1995-2024	0.61 – 1.92	2.94 – 4.72	4.17 – 7.80
Comparison to Normal Range	Normal	Above Normal	Normal

Source: NRCS 2025b & NRCS 2025c.

2.3. Field Investigation

Stream boundaries were delineated in the field by Otak biologists on December 3, 2024. The OHWM of the South Fork Chehalis River was marked with sequentially numbered orange flagging. Two data points were assessed for wetland indicators and recorded in the field. Latitude and longitude were recorded for each data point. Data point locations are shown on Figure 8 (Appendix B).

2.3.1. Wetlands

The delineation was conducted utilizing techniques published in the *1987 US Army Corps of Engineers Wetlands Delineation Manual* (USACE 1987), and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0)* (USACE 2010). Following routine methodology, data on vegetation, soils, and hydrology were collected at multiple locations.

Vegetation

Representative upland and wetland vegetation communities were documented during the field survey. Typically, three vegetation strata are inventoried, including trees within a 30-foot diameter plot, shrubs within a 15-foot diameter plot, and non-woody herbaceous plants (including forbs, grasses, sedges, and rushes) within a 5-foot diameter plot. Plant species in each stratum were identified and absolute percent cover was visually assessed. Each species was listed following the scientific nomenclature given in the United States Department of Agriculture (USDA) PLANTS database (NRCS 2025d). The wetland indicator status for each species was assigned using the *2022 National Wetland Plant List for the Western Mountains, Valleys & Coast Region* (USACE 2022).

The dominance test was the primary indicator used to determine the presence or absence of hydrophytic vegetation. A data point is considered to have a hydrophytic vegetation community if more than 50 percent of the dominant species have an indicator status of facultative (FAC), facultative-wetland (FACW), or obligate (OBL). Dominant species are defined as those that individually or collectively account for more than 50 percent of the total areal coverage of vegetation in the stratum, plus any other species that, by itself, accounts for at least 20 percent of the total areal coverage (USACE 2010). If more than 50 percent of the dominant plant species in a community have wetland indicator status of OBL, FACW, or FAC, then the plant community is considered hydrophytic (wetland).

Soils

Per USACE protocol, soil samples were obtained at representative data points by digging a pit to a depth of at least 18 inches (if possible). The Field Indicators of Hydric Soils in the United States, Version 9.0 (NRCS 2024) was used to determine the presence or absence of hydric soil. Soil colors were evaluated using a Munsell® soil color chart (Munsell Color 2010) to distinguish hydric from non-hydric soils. Soils were textured using the Guide to Texture by Feel chart (NRCS 2022).

Hydric soils are defined as soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part of the soil profile (USACE 2010). Hydric soils may exhibit certain characteristics that can be observed in the field, such as: high organic content, accumulation of sulfidic material, greenish or bluish-gray color (gleyed formation), depleted matrices, and development of redoximorphic features.

Hydrology

Wetland hydrologic conditions are considered present if, during the growing season, an area has 14 or more consecutive days of flooding or ponding; or a water table 12 inches or less below the soil surface, during the growing season at a minimum frequency of 5 years in 10 (USACE 1987 and 2010). The presence of primary and secondary wetland hydrologic indicators was determined at each wetland data point.

Primary indicators of wetland hydrology may include, but are not limited to, surface water, soil saturation within 12 inches of the surface, shallow water table, and evidence of previous water inundation or saturation (e.g., watermarks, algal mats, sediment deposits). Secondary indicators may include wetland drainage patterns, geomorphic position, stunted or stressed plants, and water-stained leaves. When at least one primary or two secondary indicators were observed, wetland hydrology was determined to occur during the growing season long enough to result in wetland hydrology conditions.

2.3.2. Ordinary High-Water Mark

The OHWM along streams within the study area were determined in the field based on the methodology outlined in the *National Ordinary High Water Mark Field Delineation Manual for Rivers and Streams* (USACE 2025) and *Determining the Ordinary High Water Mark for Shoreline Management Act Compliance in Washington State* (Ecology 2016). Identification of OHWM was based on the evaluation of stream physical characteristics, such as: presence of bed and banks, a natural line impressed on the bank, change in sediment and vegetation characteristics, wracking, erosion/scour, and silt deposits.

2.3.3. Fish and Wildlife Habitat Conservation Areas

Fish and Wildlife Habitat Conservation Areas (FWHCAs) are regulated per LCC 17.38 Article 4. Regulated FWHCAs include Aquatic Priority Habitat, WDFW Priority Habitats and Species, Locally Important Habitat and Species, and Designated Wildlife Areas (LCC 17.38.420)(Lewis County 2025a). Presence of listed species was visually assessed on December 3, 2024, during the field visit by Otak biologists (USFWS 2025b).

2.4. Wetland and Stream Classification and Ratings

Wetlands were not observed in the study area. Stream classifications were identified using WDNR's Forest Practices Activity Mapping Tool (WDNR 2025) and classified in accordance with LCC 17.38.470 and the Shoreline Master Program at LCC 17.25 (Lewis County 2021 and 2025a). Buffer widths were determined according to LCC 17.38.470 (Fish and Wildlife Habitat Conservation Areas –

Classification), Table 17.38-6 (Fish and Wildlife Habitat Conservation Areas – Regulated Areas), and the Lewis County Shoreline Master Program (Table 4-1, Section 4.04.02).

2.5. Mapping Methods

Stream OHWM flags were collected using traditional survey methods as part of the civil survey for engineering design. Survey data was converted to GIS files and imported to project maps for this report.

Section 3. Existing Conditions

3.1. Delineated Wetlands

Utilizing techniques published in the *1987 US Army Corps of Engineers Wetlands Delineation Manual* (USACE 1987), and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region* (Version 2.0) (USACE 2010), it was determined that no wetlands are present in the project study area. Soil samples in the study area lacked any hydric soil indicators with a matrix color of 10YR 4/3 and a lack of redoximorphic features to a depth of 20 inches. Vegetation in the study area outside the OHWM of the South Fork Chehalis River included typical upland species such as big-leaf maple (*Acer macrophyllum*), Douglas-fir (*Pseudotsuga menziesii*), snowberry (*Symphoricarpos albus*), and Nootka rose (*Rosa nutkana*).

3.2. Delineated Watercourses and Riparian Buffers

Otak biologists identified and delineated one watercourse (South Fork Chehalis River) in the study area as shown in Figure 8 in Appendix B. The South Fork Chehalis River does not have a stream buffer for the bridge scour protection project per the Lewis County Shoreline Master Program (SMP). Per the SMP, shoreline buffers for bridge projects are 0 feet regardless of the land use intensity or shoreline designation (Lewis County 2021). Stream characteristics, water type, and buffer width for South Fork Chehalis River are summarized in Table 3-1. Site photographs are provided in Appendix C.

Table 3-1–South Fork Chehalis River Summary

South Fork Chehalis River Information Summary			
Location:		Looking south/downstream, upstream of bridge	
	Stream Name		South Fork Chehalis River
	Local Jurisdiction		Lewis County
	Stream Type		Type S
	Buffer Width		0 Feet
	Cowardin Class		R3UBH
Documented Fish Use	The Statewide Integrated Fish Distribution (SWIFD) (WDFW 2025b) inventory lists the documented spawning of Chinook salmon (<i>Oncorhynchus tshawytscha</i>), the documented presence of coho salmon (<i>Oncorhynchus kisutch</i>), the presumed presence of rainbow trout (<i>Oncorhynchus mykiss</i>), and the documented presence of steelhead (<i>Oncorhynchus mykiss</i>). According to NOAA Fisheries, the South Fork Chehalis River is not Critical Habitat for nor are there any fish present which are protected under the Endangered Species Act.		
Stream Buffer Condition	The South Fork Chehalis River does not have a stream buffer for the bridge scour protection project per the Lewis County Shoreline Master Program (SMP). Per the SMP, shoreline buffers for bridge projects are 0 feet regardless of the land use intensity or shoreline designation. The South Fork Chehalis River riparian area is mostly in agricultural land use. The steep banks of the South Fork Chehalis River are dominated by red osier dogwood (<i>Cornus sericia</i>), invasive Himalayan Blackberry (<i>Rubus armeniacus</i>), and invasive reed canarygrass (<i>Phalaris arundinacea</i>) with scattered big-leaf maple and Douglas-fir trees.		
Flow Regime and Flow Path	The South Fork Chehalis River originates in forested hills approximately 12 miles southwest of the study area. The South Fork Chehalis River continues north of the study area approximately 7 miles before discharging into the Chehalis River. The Chehalis River flows generally northwest for approximately 65 miles and outlets to Grays Harbor.		

Section 4. Regulatory Summary

4.1. U.S. Army Corps of Engineers

The Environmental Protection Agency (EPA) and USACE regulate wetlands and other waters of the United States (WOTUS) under Section 404 of the CWA. The agencies are currently interpreting “waters of the United States” per the “Revised definition of Waters of the United States rule” as published on January 18, 2023. This rule became effective on September 8, 2023. Tributaries of waters of the United States and wetlands adjacent to waters of the United States are included in the definition.

The South Fork Chehalis River is a tributary to a traditionally navigable water. Discharge of fill material into the South Fork Chehalis River is regulated under Section 404 and 401 of the CWA.

4.2. Washington State Department of Fish and Wildlife

WDFW requires issuance of a Hydraulic Permit Approval (HPA) prior to any activities that may directly or indirectly affect streams or associated aquatic resources considered as waters of the state per the Revised Code of Washington (RCW) 90.48.020. Construction in or near state waters that will “use, divert, obstruct, or change the natural flow or bed of any of the salt or fresh waters in the state” (RCW 77.55.011(11)) require an HPA. The South Fork Chehalis is considered a water of the state, and any work within or over the OHWM of these watercourses will require an HPA per the Hydraulic Code Rules (WAC 220-660).

4.3. Washington State Department of Ecology

Ecology regulates activities in wetlands and streams under Section 401 of the CWA through the Water Quality Certification process. Ecology has authority over discharge into all wetlands and streams and can impose buffers and compensatory mitigation for impacts per RCW 90.48 (Water Pollution Act) depending on the proposed project and impacts to aquatic resources.

4.4. Local Jurisdiction – Lewis County

Wetlands, streams, associated buffers, floodplains, and FWHCAs are regulated by Lewis County under LCC 17.38 – Critical Areas and the Lewis County Shoreline Management program. South Fork Chehalis is classified as a Type S (Shoreline of the State) and has a mapped FEMA effective 100-year floodplain.

The South Fork Chehalis River is a shoreline of the state (Type S) and regulated under the Lewis County Shoreline Master Program along with all shorelands within 200 feet of the ordinary high water of the South Fork Chehalis River. Shoreline jurisdiction extends for 200 feet from the OHWM at a minimum or the extent of the floodway, whichever is larger. A floodway is not mapped on this stretch of the South Fork Chehalis River, but the entire study area is within shoreline jurisdiction as it is within 200 feet of the OHWM on each bank. The study area is located in the rural conservancy shoreline environment designation. Under the Lewis County SMP, the South Fork Chehalis River has a Standard Shoreline Buffer from the OHWM of 0 feet per Table 4-1 in Section 4.04.02 for projects that include transportation facilities, including bridges for motorized or non-motorized uses.

Section 5. References

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Appendix A: Methods and Tools

Table A-1—Methods and Tools Used to Prepare the Report

Parameter	Method or Tool	Website	Reference
Wetland Delineation	Corps of Engineers Wetlands Delineation Manual	https://www.sac.usace.army.mil/portals/43/docs/regulatory/1987_wetland_delineation_manual_reg.pdf	U.S. Army Corps of Engineers. 1987. <i>Corps of Engineers Wetland Delineation Manual</i> . Environmental Laboratory Wetlands Research Program Technical Report Y-87-1, U.S. Army Corps of Engineers, Engineer Waterways Experiment Station, Vicksburg, Mississippi.
	Regional Supplement to the Corps of Engineers Wetland Delineation Manual: WMVC	https://usace.contentdm.oclc.org/utis/getfile/collection/p266001coll1/id/7646	U.S. Army Corps of Engineers. 2010. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0), ed. J.S. Wakely, R. W. Lichvar, and C.V. noble. ERDC/EL TR-10-3. Vicksburg, MS: U.S. Army Engineer Research and Development Center.
Wetland Classification	USFWS / Cowardin Classification System	https://www.epa.gov/sites/default/files/2017-05/documents/cowardin_1979.pdf	Cowardin, L. M., V. Carter, F. C. Golet, E. T. LaRoe. 1979. Classification of wetlands and deepwater habitats of the United States. Government Printing Office, Washington, D.C.
	Hydrogeomorphic Classification (HGM) System	https://usace.contentdm.oclc.org/digital/collection/p266001coll1/id/3348/	Brinson, M. M. 1993. "A hydrogeomorphic classification for wetlands," Technical Report WRP-DE-4, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS. NTIS No. AD A270 053.
Wetland Rating	Washington State Wetland Rating System: Western WA	https://apps.ecology.wa.gov/publications/SummaryPages/2306009.html	Hruby & Yhanke. 2023. Washington State Wetland Rating System for Western Washington –2014 Update Version 2.0. Publication # 23-06-009.
	Lewis County Code	https://www.codepublishing.com/WA/LewisCounty/#!/LewisCounty17/LewisCounty1738.html#17.38	Website. Requires compliance with Lewis County Code (17.38) and use of 2014 Ecology rating system or revised and approved by Ecology.
Stream Delineation	OHW	https://erdc-library.erdc.dren.mil/items/76c61f8f-6d75-4a35-aaf3-39aa64918afb	U.S. Army Corps of Engineers. National Ordinary High Water Mark Field Delineation Manual for Rivers and Streams (National OHWM Manual). ERDC/CRREL TR-25-1, US Army Engineer Research and Development Center Cold Regions Research and Engineering Laboratory. Hanover, NH:
	OHW	https://www.ecfr.gov/current/title-33/chapter-II/part-328?toc=1	Congressional Federal Register 33 Part 328 Definition of Waters of the United States.
	OHW	https://fortress.wa.gov/ecy/publications/documents/1606029.pdf	Washington State Department of Ecology. 2016. Determining the Ordinary High Water Mark for Shoreline Management Act Compliance in Washington State – Revised October 2016. Ecology publication #16-06-

Parameter	Method or Tool	Website	Reference
Stream Classification	Department of Natural Resources (DNR) Water Typing System	Forest Practices Water Typing: https://dnr.wa.gov/forest-regulation/forest-practices-application/forest-practices-water-typing WAC 222-16-030: https://app.leg.wa.gov/WAC/default.aspx?cite=222-16-030 Water Type Mapping: https://fpamt.dnr.wa.gov/default.aspx	Washington Administrative Code (WAC) 222-16-030. DNR Water typing system.
	Lewis County Code	https://www.codepublishing.com/WA/LewisCounty/#!/LewisCounty17/LewisCounty1738.html#17.38.470	Lewis County Code 17.38.470 – Classification of Fish and Wildlife Habitat.
Wetland Indicator Status	WMVC 2022 Regional Wetland Plant List	https://wetland-plants.sec.usace.army.mil/static/reports/NWPL%20Cover%20Page%20Nationalv3.pdf	USACE. 2022. Western Mountains, Valleys & Coasts: 2020 Regional Plant List. Version 3.6.
Plant Names	USDA PLANTS Database	https://plants.usda.gov/	Website
Soils Data	Soil Survey	Web Soil Survey: http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx	Website
Threatened and Endangered Species	WDNR - WA Wetlands of High Conservation Value Mapper	http://wadnr.maps.arcgis.com/apps/webappviewer/index.html?id=5cf9e5b22f584ad7a4e2aebc63c47bda	Website
	Washington Priority Habitats and Species	https://geodataservices.wdfw.wa.gov/hp/phs/	Priority Habitats and Species (PHS) Program – August 2008 Washington State Priority Habitats and Species List (revised June 2023)
	NOAA National NMFS ESA Critical Habitat Mapper	https://www.fisheries.noaa.gov/resource/map/national-esa-critical-habitat-mapper	Website
	USFWS IPaC species lists	https://ecos.fws.gov/ipac/	Website

Appendix B: Background Information and Figures

Figure 1: Vicinity Map

Figure 2: Study Area

Figure 3: USGS Topo Map

Figure 4: National Wetland Inventory

Figure 5: NRCS Soil Survey

Figure 6: Lewis County Wetland Inventory

Figure 7: Lewis County Shoreline Designation

Figure 8: Delineated Streams



FIGURE 1
VICINITY MAP

WILDWOOD ROAD BRIDGE SCOUR REPAIR | 21588B
LEWIS COUNTY, WASHINGTON

LEGEND

Study Area

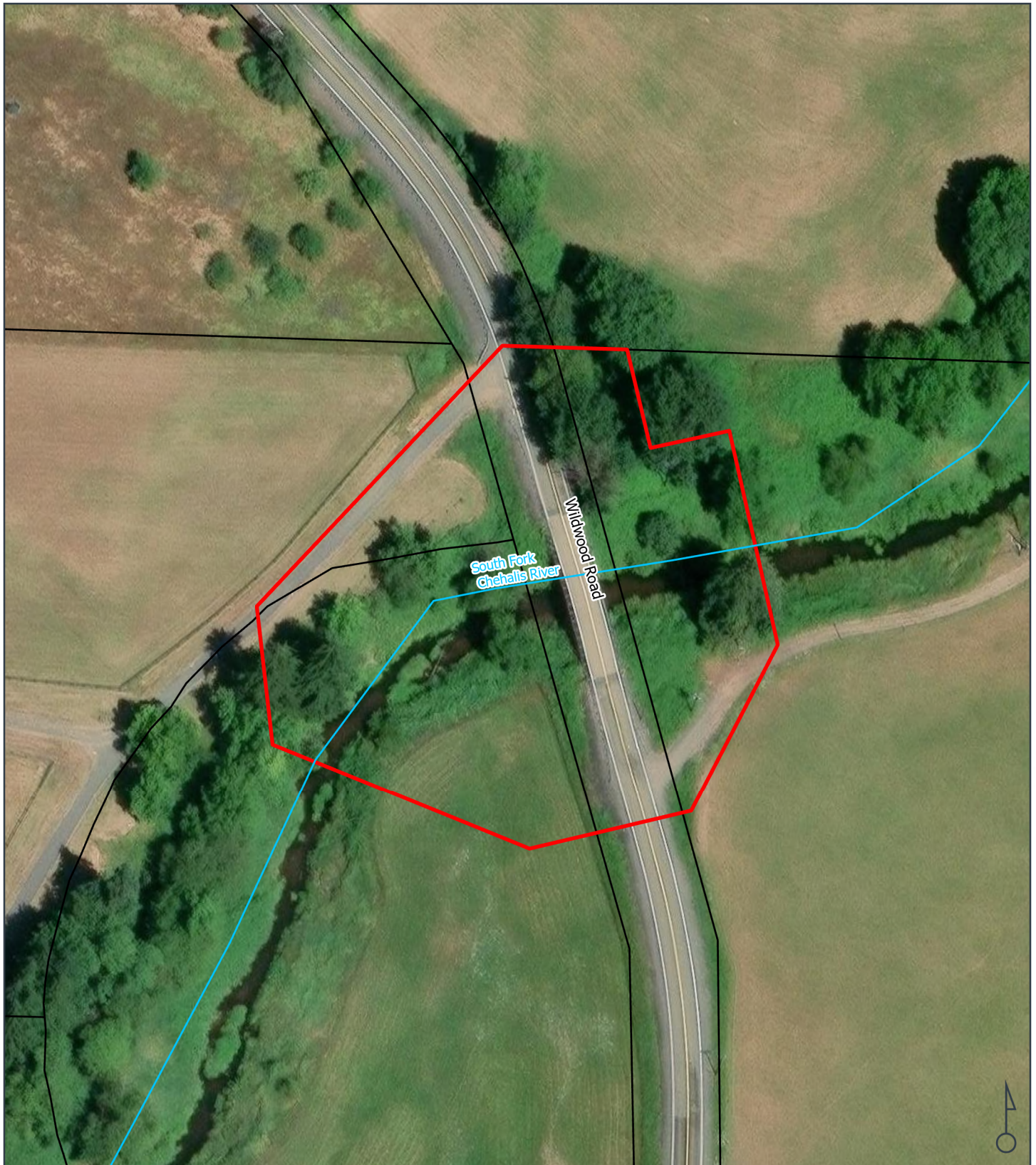


FIGURE 2 SITE OVERVIEW

WILDWOOD ROAD BRIDGE SCOUR REPAIR | 21588B
LEWIS COUNTY, WASHINGTON

LEGEND

- ▭ Study Area
- WA DNR Stream Inventory

0 100 ft

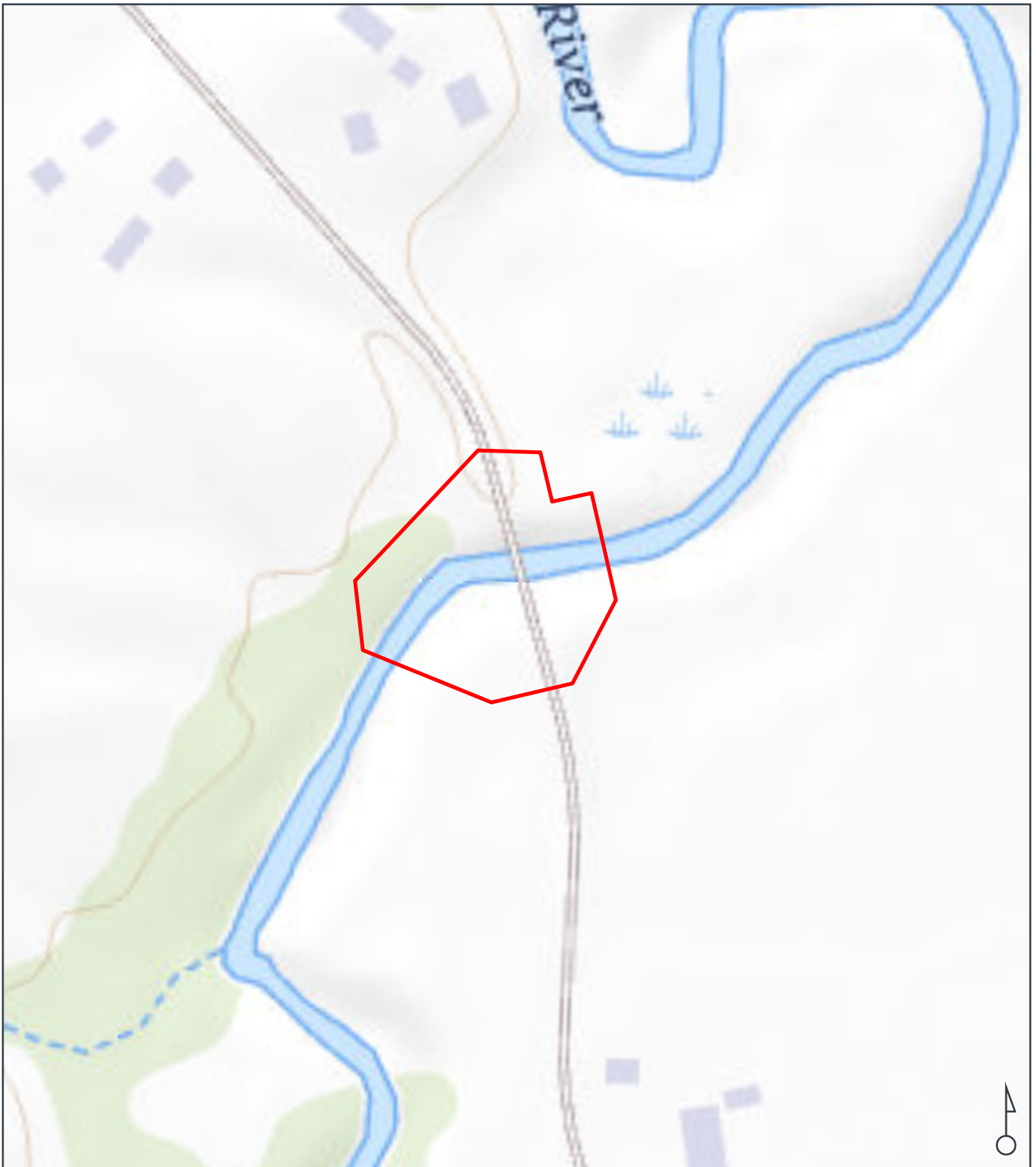


FIGURE 3
USGS TOPO

WILDWOOD ROAD BRIDGE SCOUR REPAIR | 21588B
LEWIS COUNTY, WASHINGTON

LEGEND

 Study Area

0 200 ft



FIGURE 4
NATIONAL WETLANDS INVENTORY
 WILDWOOD ROAD BRIDGE SCOUR REPAIR | 21588B
 LEWIS COUNTY, WASHINGTON

LEGEND

- National Wetlands Inventory
- WA DNR Stream Inventory
- Study Area

0 100 ft



FIGURE 5
NRCS SOIL SURVEY
WILDWOOD ROAD BRIDGE SCOUR REPAIR | 21588B
LEWIS COUNTY, WASHINGTON

LEGEND

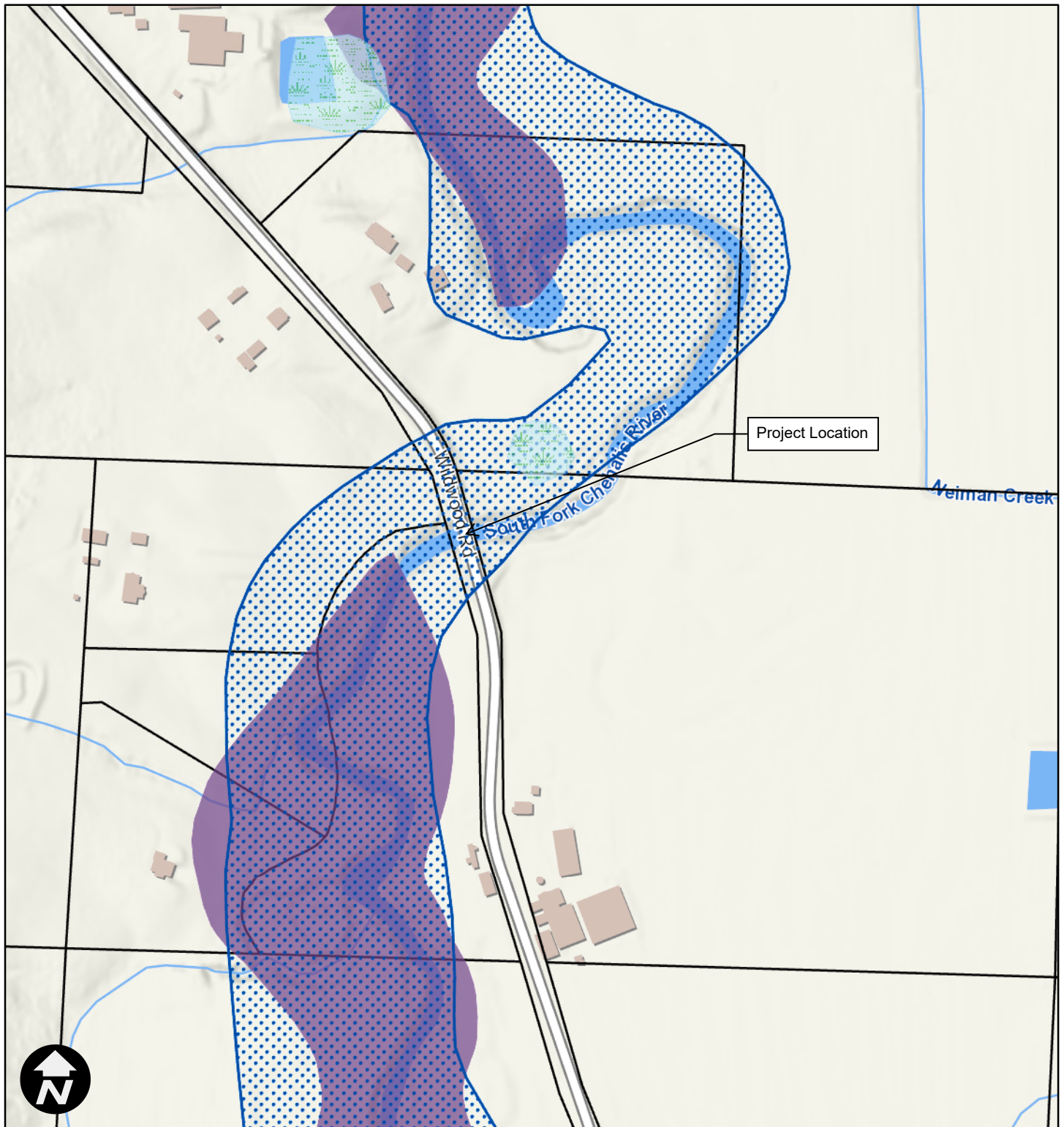
- USGS Soil Survey Map Units
- Study Area

130 - Melbourne loam, 0 to 8 percent slopes
 148 - Newberg fine sandy loam
 48 - Chehalis silty clay

Data Sources:
 Date: 7/3/2025
 Disclaimer: This data is not to survey accuracy and is meant for planning purposes only.
 O:\PROJECT\21500\21588B\04 CAD\GIS\MXD\21588B_WildwoodRd.aprx



Figure 6 - Lewis County Critical Areas Inventory



8/23/2024, 1:20:19 PM

1:4,514

-  Wetlands
-  FEMA 100-Year
-  CARA Category I
-  CARA Category II
-  Category III
-  Parcels

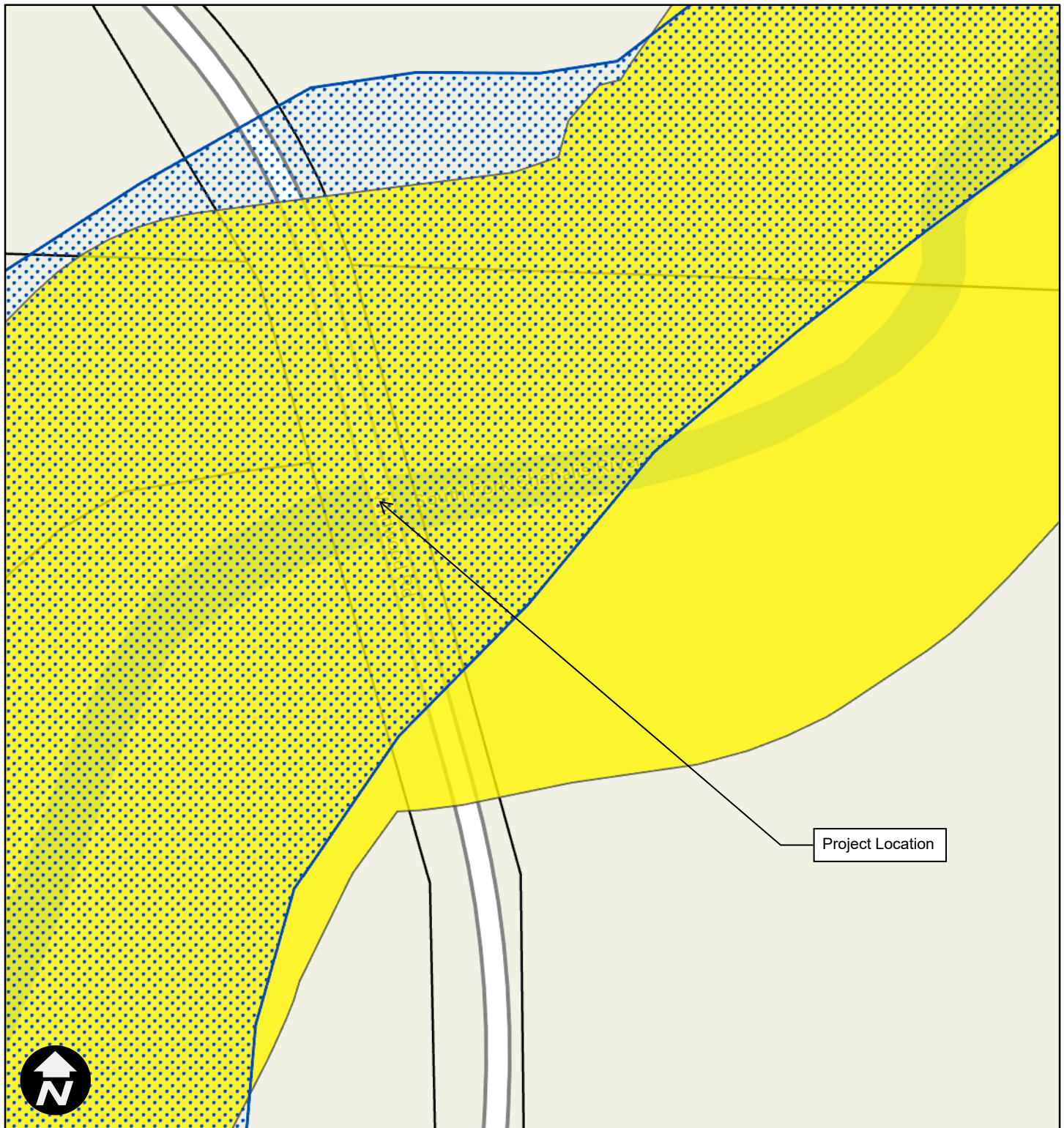
0 205 410 820 ft
NAD 1983 StatePlane Washington South FIPS 4602 Feet



Lewis County does not guarantee the accuracy of the information shown on this map and is not responsible for any use or misuse by others regarding this material. It is provided for general informational purposes only. This map does not meet legal, engineering, or survey standards. Please practice due diligence and consult with licensed experts before making decisions.

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Figure 7: Lewis County Shoreline Designation



2/9/2025, 5:57:13 PM

1:1,200

- | | |
|---------------------|-------------------------------|
| — FEMA BFE (NAVD88) | Shoreline Environments |
| □ FEMA Panels | □ Aquatic |
| ■ FEMA 100-Year | ■ Natural |
| ■ FEMA 500-Year | ■ Rural or Urban Conservancy |
| ■ Floodway | ■ Shoreline Residential |
| | ■ High Intensity |

0 50 100 200 ft
NAD 1983 StatePlane Washington South FIPS 4602 Feet



Lewis County does not guarantee the accuracy of the information shown on this map and is not responsible for any use or misuse by others regarding this material. It is provided for general informational purposes only. This map does not meet legal, engineering, or survey standards. Please practice due diligence and consult with licensed experts before making decisions.

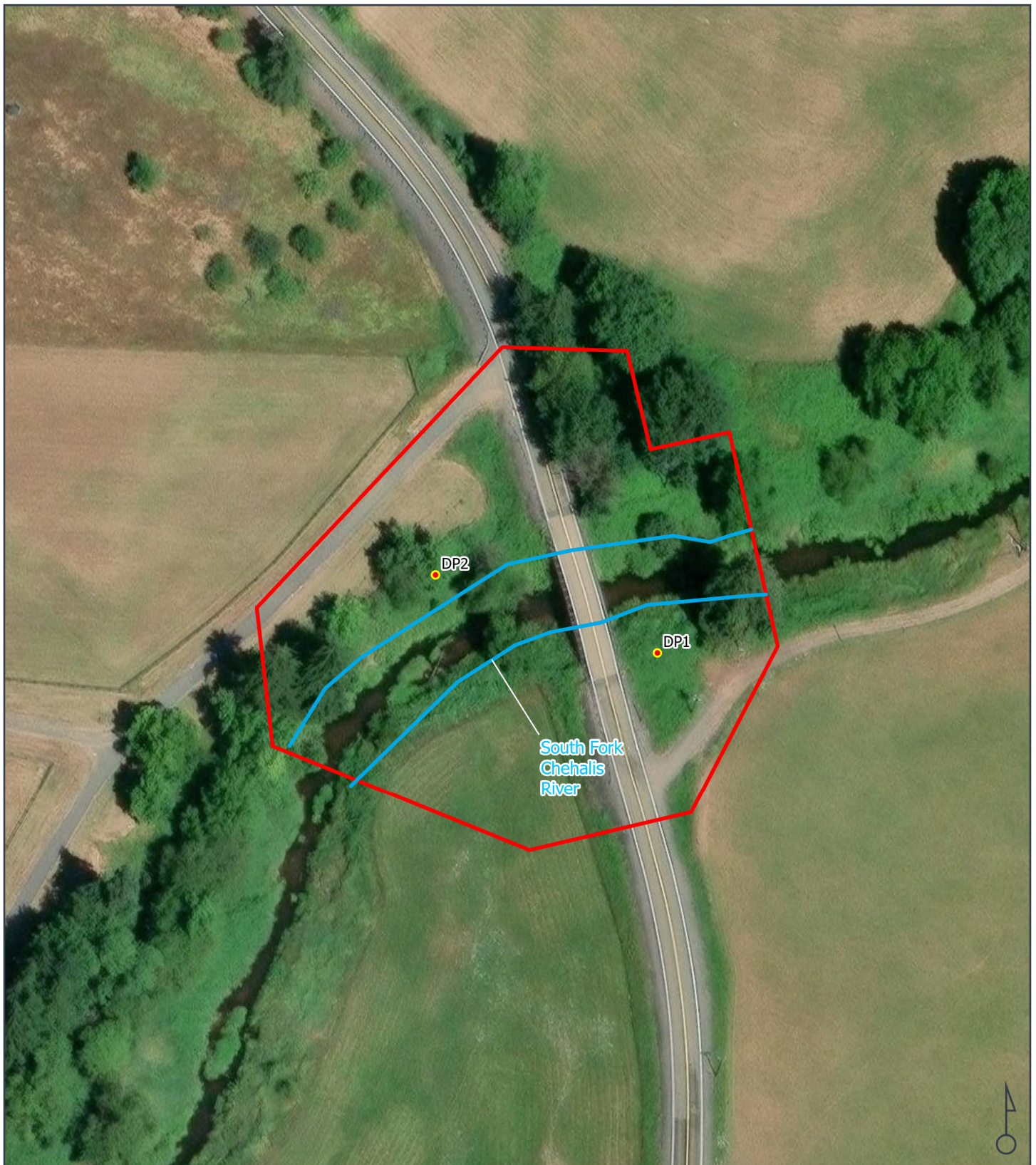


FIGURE 8
DELINEATED STREAMS

WILDWOOD ROAD BRIDGE SCOUR REPAIR | 21588B
LEWIS COUNTY, WASHINGTON

LEGEND

- Data Point
- Ordinary High Water
- Study Area

0 100 ft

Appendix C: Site Photos

Site Photographs – December 3, 2024



1. North bank of the South Fork Chehalis River, east of Wildwood Rd and Lewis County Bridge No.3



2. Lewis County Bridge No. 3 and the South Fork Chehalis River, looking west from south bank of South Fork Chehalis River



3. North bank of South Fork Chehalis River and piles of Lewis County Bridge No. 03, viewed from south bank



4. North bank of South Fork Chehalis River and piles of Lewis County Bridge No. 03, viewed from south bank



5. Agricultural fields south of South Fork Chehalis River and west of Wildwood Rd., viewed from Wildwood Rd. looking northwest



6. South Fork Chehalis River and Lewis County Bridge No. 3 looking northeast from the top of the south bank



7. Top of south bank of South Fork Chehalis River looking east toward Lewis County Bridge No. 03 with livestock fields to the south



8. South Fork Chehalis River looking south from the top of the south bank



9. Gravel driveway along top of south bank of South Fork Chehalis River east of Wildwood Rd., view looking northeast



10. Wildwood Road and Lewis County Bridge No. 03 looking north

Appendix D: Wetland Determination Data Forms

DP1

DP2

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project Site: Wildwood Road City/County: ____/Lewis County Sampling Date: 12/3/2024
 Applicant/Owner: Lewis County State: WA Sampling Point: DP1
 Investigator(s): J. Gray, K. Corrigan Section, Township, Range: S24 T12N R4W
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): none Slope (%): 10
 Subregion (LRR): A Lat: 46.505871 Long: -123.121315 Datum: NAD83
 Soil Map Unit Name: Chehalis silty clay NWI classification: R3UBH

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐, Soil ☐, or Hydrology ☐, significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐, Soil ☐, or Hydrology ☐, naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒ No ☐	Is the Sampled Area within a Wetland?	Yes ☐ No ☐
Hydric Soil Present?	Yes ☐ No ☒		
Wetland Hydrology Present?	Yes ☐ No ☒		
Remarks: DP1 is located approximately 30 ft east of the Wildwood Rd bridge and approximately 35 ft south of the South Fork Chehalis River OHWM on the roght bank. Hydrophytic vegetation indicators were observed at DP1. Hydric soil and wetland hydrology indicators were not observed at DP1.			

VEGETATION – Use scientific names of plants

Tree Stratum (Plot size: <u>30-ft diam.</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1. <u>==</u>	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC:	<u>2</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata:	<u>2</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>100</u> (A/B)
4. _____	_____	_____	_____		
50% = <u>____</u> , 20% = <u>____</u>	<u>0</u>	= Total Cover			
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15-ft diam.</u>)					
1. <u>Rubus armeniacus</u>	<u>50</u>	<u>yes</u>	<u>FAC</u>	Prevalence Index worksheet:	
2. _____	_____	_____	_____	<u>Total % Cover of:</u>	<u>Multiply by:</u>
3. _____	_____	_____	_____	OBL species _____	x1 = _____
4. _____	_____	_____	_____	FACW species _____	x2 = _____
5. _____	_____	_____	_____	FAC species _____	x3 = _____
50% = <u>25</u> , 20% = <u>10</u>	<u>50</u>	= Total Cover		FACU species _____	x4 = _____
<u>Herb Stratum</u> (Plot size: <u>5-ft diam.</u>)					
1. <u>Phalaris arundinacea</u>	<u>80</u>	<u>yes</u>	<u>FACW</u>	UPL species _____	x5 = _____
2. _____	_____	_____	_____	Column Totals: _____ (A)	_____ (B)
3. _____	_____	_____	_____	Prevalence Index = B/A = _____	
4. _____	_____	_____	_____	Hydrophytic Vegetation Indicators:	
5. _____	_____	_____	_____	☐ 1 – Rapid Test for Hydrophytic Vegetation	
6. _____	_____	_____	_____	☒ 2 - Dominance Test is >50%	
7. _____	_____	_____	_____	☐ 3 - Prevalence Index is ≤3.0 ¹	
8. _____	_____	_____	_____	☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
9. _____	_____	_____	_____	☐ 5 - Wetland Non-Vascular Plants ¹	
10. _____	_____	_____	_____	☐ Problematic Hydrophytic Vegetation ¹ (Explain)	
11. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
50% = <u>40</u> , 20% = <u>16</u>	<u>80</u>	= Total Cover			
<u>Woody Vine Stratum</u> (Plot size: <u>15-ft diam.</u>)					
1. <u>==</u>	_____	_____	_____	Hydrophytic Vegetation Present?	
2. _____	_____	_____	_____	Yes ☒	No ☐
50% = <u>____</u> , 20% = <u>____</u>	<u>0</u>	= Total Cover			
% Bare Ground in Herb Stratum <u>20</u>					

Remarks: Vegetation at DP1 passes the Dominance Test hydrophytic vegetation indicator.

Project Site: Wildwood Road

SOIL

Sampling Point: DP1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	10YR 3/2	100	_____	_____	_____	_____	Silt Loam	_____
4-20	10YR 4/3	100	_____	_____	_____	_____	Silt Loam	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)				Indicators for Problematic Hydric Soils³:			
☐ Histosol (A1)	☐ Sandy Redox (S5)	☐ 2 cm Muck (A10)					
☐ Histic Epipedon (A2)	☐ Stripped Matrix (S6)	☐ Red Parent Material (TF2)					
☐ Black Histic (A3)	☐ Loamy Mucky Mineral (F1) (except MLRA 1)	☐ Very Shallow Dark Surface (TF12)					
☐ Hydrogen Sulfide (A4)	☐ Loamy Gleyed Matrix (F2)	☐ Other (Explain in Remarks)					
☐ Depleted Below Dark Surface (A11)	☐ Depleted Matrix (F3)						
☐ Thick Dark Surface (A12)	☐ Redox Dark Surface (F6)						
☐ Sandy Mucky Mineral (S1)	☐ Depleted Dark Surface (F7)						
☐ Sandy Gleyed Matrix (S4)	☐ Redox Depressions (F8)						

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present): Type: _____ Depth (inches): _____		Hydric Soils Present? Yes ☐ No ☒
Remarks: No hydric soil indicators observed at DP1.		

HYDROLOGY

Wetland Hydrology Indicators:					
Primary Indicators (minimum of one required; check all that apply)			Secondary Indicators (2 or more required)		
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Water-Stained Leaves (B9)			
☐ High Water Table (A2)	(except MLRA 1, 2, 4A, and 4B)	(MLRA 1, 2, 4A, and 4B)			
☐ Saturation (A3)	☐ Salt Crust (B11)	☐ Drainage Patterns (B10)			
☐ Water Marks (B1)	☐ Aquatic Invertebrates (B13)	☐ Dry-Season Water Table (C2)			
☐ Sediment Deposits (B2)	☐ Hydrogen Sulfide Odor (C1)	☐ Saturation Visible on Aerial Imagery (C9)			
☐ Drift Deposits (B3)	☐ Oxidized Rhizospheres along Living Roots (C3)	☐ Geomorphic Position (D2)			
☐ Algal Mat or Crust (B4)	☐ Presence of Reduced Iron (C4)	☐ Shallow Aquitard (D3)			
☐ Iron Deposits (B5)	☐ Recent Iron Reduction in Tilled Soils (C6)	☒ FAC-Neutral Test (D5)			
☐ Surface Soil Cracks (B6)	☐ Stunted or Stresses Plants (D1) (LRR A)	☐ Raised Ant Mounds (D6) (LRR A)			
☐ Inundation Visible on Aerial Imagery (B7)	☐ Other (Explain in Remarks)	☐ Frost-Heave Hummocks (D7)			
☐ Sparsely Vegetated Concave Surface (B8)					

Field Observations:					
Surface Water Present?	Yes	☐	No	☒	Depth (inches): _____
Water Table Present?	Yes	☐	No	☒	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes	☐	No	☒	Depth (inches): _____
Wetland Hydrology Present? Yes ☐ No ☒					
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks: No primary wetland hydrology indicators observed at DP1. Only 1 secondary wetland hydrology indicator observed at DP1 (FAC-Neutral Test (D5)).					

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project Site: Wildwood Road City/County: ____/Lewis County Sampling Date: 12/3/2024
 Applicant/Owner: Lewis County State: WA Sampling Point: DP2
 Investigator(s): J. Gray, K. Corrigan Section, Township, Range: S24 T12N R4W
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): none Slope (%): 10
 Subregion (LRR): A Lat: 46.506012 Long: -123.121966 Datum: NAD83
 Soil Map Unit Name: Melbourne loam, 0-8% slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐, Soil ☐, or Hydrology ☐, significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐, Soil ☐, or Hydrology ☐, naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☐ No ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present?	Yes ☐ No ☒	
Wetland Hydrology Present?	Yes ☐ No ☒	
Remarks: DP2 is located approximately 75 ft west of the Wildwood Rd bridge and approximately 35 ft north of the South Fork Chehalis River OHWM on the left bank. No wetland indicators were observed. Data point is upland.		

VEGETATION – Use scientific names of plants

Tree Stratum (Plot size: 30-ft diam.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:
1. <u>Acer macrophyllum</u>	<u>40</u>	<u>yes</u>	<u>FACU</u>	
2. <u>Pseudotsuga menziesii</u>	<u>20</u>	<u>yes</u>	<u>FACU</u>	Total Number of Dominant Species Across All Strata: <u>4</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>25</u> (A/B)
4. _____	_____	_____	_____	
50% = <u>30</u> , 20% = <u>12</u>	<u>60</u>	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15-ft diam.)				Prevalence Index worksheet:
1. <u>Symphoricarpos albus</u>	<u>50</u>	<u>yes</u>	<u>FACU</u>	
2. <u>Rosa nutkana</u>	<u>50</u>	<u>yes</u>	<u>FAC</u>	OBL species _____ x1 = _____
3. _____	_____	_____	_____	FACW species _____ x2 = _____
4. _____	_____	_____	_____	FAC species _____ x3 = _____
5. _____	_____	_____	_____	FACU species _____ x4 = _____
50% = <u>50</u> , 20% = <u>20</u>	<u>100</u>	= Total Cover		UPL species _____ x5 = _____
Herb Stratum (Plot size: 5-ft diam.)				Column Totals: _____ (A) _____ (B)
1. _____	_____	_____	_____	Prevalence Index = B/A = _____
2. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: ☐ 1 – Rapid Test for Hydrophytic Vegetation ☐ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ 5 - Wetland Non-Vascular Plants ¹ ☐ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
50% = _____, 20% = _____	<u>0</u>	= Total Cover		
Woody Vine Stratum (Plot size: 15-ft diam.)				Hydrophytic Vegetation Present? Yes ☐ No ☒
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
50% = _____, 20% = _____	<u>0</u>	= Total Cover		
% Bare Ground in Herb Stratum <u>100</u>				

Remarks: No hydrophytic vegetation indicators observed at DP2.

Project Site: Wildwood Road

SOIL

Sampling Point: DP2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-20	10YR 4/3	100					Silt Loam	

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
☐ Histosol (A1)	☐ Sandy Redox (S5)	☐ 2 cm Muck (A10)
☐ Histic Epipedon (A2)	☐ Stripped Matrix (S6)	☐ Red Parent Material (TF2)
☐ Black Histic (A3)	☐ Loamy Mucky Mineral (F1) (except MLRA 1)	☐ Very Shallow Dark Surface (TF12)
☐ Hydrogen Sulfide (A4)	☐ Loamy Gleyed Matrix (F2)	☐ Other (Explain in Remarks)
☐ Depleted Below Dark Surface (A11)	☐ Depleted Matrix (F3)	
☐ Thick Dark Surface (A12)	☐ Redox Dark Surface (F6)	
☐ Sandy Mucky Mineral (S1)	☐ Depleted Dark Surface (F7)	
☐ Sandy Gleyed Matrix (S4)	☐ Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soils Present? Yes ☐ No ☒
--	--

Remarks: No hydric soil indicators observed at DP2.

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
☐ Surface Water (A1) ☐ Water-Stained Leaves (B9) ☐ High Water Table (A2) (except MLRA 1, 2, 4A, and 4B) ☐ Saturation (A3) ☐ Salt Crust (B11) ☐ Water Marks (B1) ☐ Aquatic Invertebrates (B13) ☐ Sediment Deposits (B2) ☐ Hydrogen Sulfide Odor (C1) ☐ Drift Deposits (B3) ☐ Oxidized Rhizospheres along Living Roots (C3) ☐ Algal Mat or Crust (B4) ☐ Presence of Reduced Iron (C4) ☐ Iron Deposits (B5) ☐ Recent Iron Reduction in Tilled Soils (C6) ☐ Surface Soil Cracks (B6) ☐ Stunted or Stresses Plants (D1) (LRR A) ☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in Remarks) ☐ Sparsely Vegetated Concave Surface (B8)	☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ☐ Drainage Patterns (B10) ☐ Dry-Season Water Table (C2) ☐ Saturation Visible on Aerial Imagery (C9) ☐ Geomorphic Position (D2) ☐ Shallow Aquitard (D3) ☐ FAC-Neutral Test (D5) ☐ Raised Ant Mounds (D6) (LRR A) ☐ Frost-Heave Hummocks (D7)

Field Observations: Surface Water Present? Yes ☐ No ☒ Depth (inches): _____ Water Table Present? Yes ☐ No ☒ Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes ☐ No ☒ Depth (inches): _____	Wetland Hydrology Present? Yes ☐ No ☒
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: No primary wetland hydrology indicators observed at DP2.
 No secondary wetland hydrology indicator observed at DP2.